AMENDMENT TO THE CLAIMS.

1. (Currently amended): A method of converting glycerol to 1,3-propanediol in a thermophilic organism, the method comprising:

a) providing a thermophilic organism that ferments glycerol to 1,3-propanediol and

b) culturing the thermophilic organism under conditions such that 1,3-propanediol is produced,

wherein the thermophilic organism is a ~~species~~ strain of *Caloramator* or a ~~species~~ strain of ~~*Thermofrachium*~~ *Thermobrachium* having the following characteristics

(i) a temperature range for growth at pH 6.0 of 33 to 60°C, and

(ii) a pH range for growth from 5.0 to 7.8 at a temperature of 25°C,

and wherein the 16S rDNA of the thermophilic organism is at least 95% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

2. (Original): The method of Claim 1, further comprising the step of collecting 1,3-propanediol produced by the thermophilic organism.

3. (Currently amended): The method of Claim 2, further comprising the step of polymerizing the 1,3- propanediol into ~~a polyester~~ poly(1,3-propylene) terephthalate.

4. (Canceled)

Claims 5 - 45 (Previously canceled)

46. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under anaerobic conditions.

47. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under nitrogen.

48. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under argon.

49. (Previously amended): The method of Claim 1, wherein the thermophilic organism is cultured under a mixture of nitrogen to carbon dioxide in a ratio of about 80 to about 20.

50. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured in the presence of an oxygen scavenger.

51. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured in an anaerobic chamber.

52. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under microaerobic conditions.

53. (Previously added): The method of Claim 2, wherein the collected 1,3-propanediol is further purified.

Claims 54 – 56. (Previously canceled)

57. (Previously added): The method of Claim 1, wherein the 16S rDNA of the thermophilic organism is at least 99% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

58. (Previously added): The method of Claim 1, wherein the thermophilic organism is adsorbed on a solid support.

59. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under aerobic conditions.

Claims 60 – 61. (Canceled)

62. (Currently amended): A method of converting glycerol to 1,3-propanediol in a strain of *Caloramator viterbiensis*, the method comprising:

a) providing a thermophilic strain of *Caloramator viterbiensis* having the following characteristics

i) a temperature range for growth at pH 6.0 of 33 to 64°C

ii) a pH range for growth from 5.0 to 7.8 at a temperature of 25°C,

iii) a 16S rDNA which is at least 99% identical to the 16S rDNA sequence of the organism deposited as ATCC designation PTA-584 and

~~ii)~~ iv) ferments glycerol to 1,3-propanediol; and

b) culturing the thermophilic strain of *Caloramator viterbiensis* under conditions such that 1,3-propanediol is produced.

63. (New): The method according to Claim 62, further comprising collecting the 1,3-propanediol.

64. (New): The method according to Claim 1, wherein the optimum pH range for growth is from 6.0 to 6.5 at a temperature of 25°C.

65. (New): The method according to Claim 1, wherein the guanine-plus-cytosine (G+C) content of the genomic DNA of the thermophilic strain is 32 mol% measured by high-performance liquid chromatography.